A SYSTEM AND PROCESS FOR CALIBRATING A MICROPHONE ARRAY

ABSTRACT OF THE DISCLOSURE

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A system and process for self calibrating a plurality of audio sensors of a microphone array on a continuous basis, while the array is in operation, is presented. In essence, the present microphone array self calibration system and process finds a set of corrective gains that provides the best channel matching amongst the audio sensors of the array by compensating for the differences in the sensor parameters. The present system and process is not CPU use intensive and is capable of providing real-time microphone array self-calibration. It is based on a simplified channel model, projection of sensor coordinates on the direction of arrival (DOA) line, and approximation of received energy levels, all of which speed up processing time.